

# CLAIMS ONLY

SERIAL NO.

09944603

FILING DATE

04-04-01

APPLICANT(S)

## CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
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TOTAL IND.	14					
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TOTAL CLAIMS	33					

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	IND.	DEP.	IND.	DEP.	IND.	DEP.
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\* MAY BE USED FOR ADDITIONAL CLAIMS OR AMENDMENTS

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Sheet	1	of	7	Attorney Docket Number	9999-1
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### U.S. PATENT DOCUMENTS

Examiners Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	4,626,075		Chemla	12-2-1986	
	AB	5,170,273		Nishio	12-8-1992	
	AC	5,191,457		Yamazaki	3-2-1993	
	AD	5,194,977		Nishio	3-16-1993	
	AE	5,400,322		Hunt et al	3-21-1995	
	AF	5,452,115		Tomioka	9-19-1995	
	AG	5,457,687		Newman	10-05-1995	
	AH	5,479,447		Chow et al	12-26-1995	
	AI	5,557,439		Alexander et al	9-17-1996	
	AJ	5,680,490		Cohen et al	10-21-1997	
	AK	5,712,932		Alexander et al	1-27-1998	
	AL	5,724,167		Sabella	3-3-1998	
	AM	5,739,935		Sabella	4-14-1998	
	AN	5,774,244		Tandon et al	06-30-1998	
	AO	5,867,289		Gertsel	2-2-1999	
	AP	6,108,112		Touma	8-22-2000	
	AQ	6,233,082		Johnson	05-15-2001	

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AR	Mining the Optical Bandwidth for a Terabit per second, Alan Wilner, IEEE Spectrum, April 1997, Pages 32-41	
	AS	Record Data-Transmission Rate Reported at ECOC '96, Laser Focus World, November 1996, pages 40-42	

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Sheet	2	of	7	Attorney Docket Number	9999-1
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Complete if Known

Application Number	09/944,603
Filing Date	September 4, 2001
First Named Inventor	Handelman
Group Art Unit	
Examiner Name	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AT	Multiple Wavelengths Exploit Fiber Capacity, Eric Lerner, Laser Focus World, July 1997, pages 119-125
	AU	Advances in Dense WDM push diode-laser design, Diana Zankowsky, Laser Focus World, August 1997, pages 167-171
	AV	Multistage Amplifier Provides Gain across 80 nm, pages 22-23
	AW	Optical Switching Promises cure for telecommunications logjam, Jeff Hecht, Laser Focus World, September 1998, pages 69-72
	AX	The Communications Handbook, Jeffrey Gibson, 1997, pages 883-890
	AY	WDM Local Area Networks, Kazovsky et al., IEEE LTS, May 1992, pages 8-15
	AZ	Optical Switches Ease Bandwidth Crunch, Europhotonics, Rien Flipse, August/September 1998, pages 44-45
	BA	Speed Demons: Is 'Faster' Better and Cheaper? Stephanie Weiss, Photonics Spectra, February 1999, pages 96-102
	BB	Wavelength Lockers Keep Lasers in Line, Ed Miskovic, Photonics Spectra, February 1999, pages 104-110
	BC	Optical Switches Pursue Crossconnect Markets, Hassaan Jones-Bey, Laser Focus World, May 1998, pages 153-162
	BD	Demand Triggers Advances in Dense WDM Components, Raymond Nering, Optoelectronics World, September 1998, pages S5-S8
	BE	Optical Networks, Hector Escobar, Photonics Spectra, December 1998, pages 163-167

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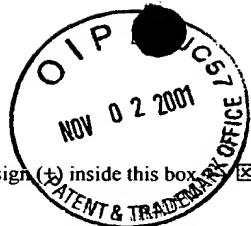
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	Application Number	09/944,603
	Filing Date	September 4, 2001
	First Named Inventor	Handelman
	Group Art Unit	
	Examiner Name	

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Sheet	4	of	7	Attorney Docket Number	9999-1
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			Complete if Known	
			Application Number	09/944,603
			Filing Date	September 4, 2001
			First Named Inventor	Handelman
			Group Art Unit	
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Sheet	5	of	7	Attorney Docket Number	9999-1
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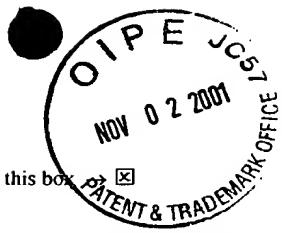
CA	Combining Gratings and Filters Reduces WDM Channel Spacing, Pan and Shi, OptoElectronics World, September 1998, pages S11-S17	
CB	Picosecond-Accuracy All-Optical Bit Phase Sensing Using a Nonlinear Optical Loop Mirror, Hall et al., IEEE Photonics Technology Letters, Vol. 7, No. 8, August 1995, pages 935-937	
CC	An Ultrafast Variable Optical Delay Technique, Hall et al., IEEE Photonics Technology Letters, Vol. 12, No. 2, February 2000, pages 208-210	
CD	Prescaled 6.3 GHz clock recovery from 50 Gbit/s TDM Optical Signal with 50 GHz PLL using four-wave mixing in a travelling wave laser diode optical amplifier, Electronics Letters, 12 May 1994, Vol. 30, No. 10, pages 807-809	
CE	Variable Optical delay line with diffraction limited Autoalignment, Klovekorn and Munch, Applied Optics, April 1, 1998, Vol. 37, No. 10, pages 1903-1904	
CF	Compact 40 Gbit/s Optical Demultiplexer using a GaInAsP Optical Amplifier, Electronics Letters, November 25, 1993, Vol. 29, No. 24, pages 2115-2116	
CG	Lucent Upgrades WaveStar to 20-Channel, 800-Gb/s Transmission; Chalmers Develops 49-dB Optical Parametric Amplifier, Photonics Spectra, June 2000, page 46	
CH	Bit-Rate Flexible All-Optical Demultiplexing Using a Nonlinear Optical Loop Mirror, Patrick et al., Electronics Letters, April 15, 1993, Vol. 29, No. 8, pages 702-703	
CI	All-Optical High Speed Demultiplexing with a Semiconductor Laser Amplifier in a Loop Mirror Configuration, Eisele et al., Electronics Letters, June 24, 1993, Vol. 29, No. 13, pages 1167-1168	
CJ	Optical Amplifiers Revolutionize Communications, Laser Focus World, September 1998, pages 28-32	

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Application Number		09/944,603	
Filing Date		September 4, 2001	
First Named Inventor		Handelman	
Group Art Unit			
Examiner Name			
Sheet	6	of	7
Attorney Docket Number			
9999-1			

	CK	Single Interferometer Demultiplexes 40 Gbit/s Optical-Time-Division-Multiplexed Signal, Laser Focus World, November 1999, page 11	
	CL	Fiber-Optic Chips Multiplex 16 T1/E1 Channels Over One Cable, Electronic Design, April 17, 2000, page 46	
	CM	Analysis and Dimensioning of Switchless Networks for Single-Layer Optical Architecture, Binetti et al., Journal of Lightwave Technology, Vol. 18, No. 2, February 2000, pages 144-153	
	CN	100-Gbit/s Bitwise Logic, Hall et al., MIT Lincoln Laboratory, Optics Letters, Vol. 23, No. 16, August 15, 1998, pages 1271-1273	
	CO	An Optical Technique for Bit and Packet Synchronization, Blixt and Bowers, IEEE Photonics Technology Letters, Vol. 7, No. 1, January 1995, pages 123-125	
	CP	Double-Spreading Modulation Scheme Picks up Where CDMA and TDMA Leave Off, Electronics Designs, July 10, 2000, pages 28-32	
	CQ	Transmission of a True Single Polarisation 40 Gbit/s Solution Data Signal Over 205km Using a Stabilised Erbium Fibre Ring Laser and 40 GHz Electronic Timing Recovery, Ellis et al., Electronic Letters, Vol. 29, No. 11, May 27, 1993, pages 990-992	
	CR	Time-Stretch Methods Capture Fast Waveforms, Jalali et al., Microwaves & RF, April 1999, pages 62-69	
	CS	The Fiber-Optic Subscriber Network in Japan, Wakui, IEEE Communications Magazine, February 1994, pages 56-63	
	CT	A Justification for a Variable Bandwidth Allocation Methodology for SONET Virtually Concatenated SPEs, Nevin JONES and Trevor WILSON, Lucent Technologies, July 10-14, 2000	
	CU	Higher Order SONET Virtual Concatenation, Nevin JONES, Paul LANGNER and Charles WEBB, Lucent Technologies, April 9, 1999	

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Sheet	7	Of	7	Attorney Docket Number	9999-1
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	CV	The Communications Handbook, 1997, Chapter 39, pages 542-553	
	CW	The Communications Handbook, 1997, Chapter 40, pages 554-564	
	CX	Architectural and Technological Issues for Future Optical Internet Networks, Listanti, et al., IEEE Communications Magazine, September 2000, pages 82-92	
	CY	IP Over Optical Networks: Architectural Aspects, Rajagopalan, et al., IEEE Communications Magazine, September 2000, pages 94-102	
	CZ	Labeled Optical Burst Switching for IP-over-WDM Integration, Chunming Qiao, IEEE Communications Magazine, September 2000, pages 104-114	
	DA	Approaches to Optical Internet Packet Switching, Hunter, et al., IEEE Communications Magazine, September 2000, pages 116-122	
	DB	Photonic Switches: Fast, but Functional? McCarthy, Photonics Spectra, March 2001, pages 140-150	
	DC	The Communications Handbook, Gibson, A CRC Handbook Published in Cooperation with IEEE Press, 1997 CRC Press, Inc., pages 513-528	
	DD	A Proposed Link Capacity Adjustment Scheme (LCAS) for SONET Virtually Concatenated SPEs, Jones, et al., Lucent Technologies, T1X1.5/200-199, pages 1-30	
	DE	Fiber-based components meets the needs of next-generation amplifiers, Bourgeois, WM Solutions, March 2001, 5-pages <a href="http://www.optoelectronics-world.com">www.optoelectronics-world.com</a>	
	DF	Spectral Equalization Keeps Optical, Ashmead, WM Solutions, January 2001, 5-pages <a href="http://www.optoelectronics-world.com">www.optoelectronics-world.com</a>	
	DG	Keep Your Photons in Line, Wesson et al., Photonics Spectra, September 1999, pages 102-108	
	DH	Router Promises Faster Switching, Robinson, Photonics Technology World, Photonics Spectra, August 2001, page 24	

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